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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/089,992	07/10/2002	Jonathan Sharp	042933/302069	3264
826 7590 11/23/2009 ALSTON & BIRD LLP BANK OF AMERICA PLAZA 101 SOUTH TRYON STREET, SUITE 4000 CHARLOTTE, NC 28280-4000			EXAMINER PHUONG, DAI	
			ART UNIT 2617	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/089,992

Applicant(s)

SHARP, JONATHAN

Examiner

DAI A. PHUONG

Art Unit

2617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 July 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Argument

1. Applicant's arguments filed 07/29/2009 have been fully considered but they are not persuasive. Please see explanation below.

Applicant, on pages 3 to 4 of the remark, argues that neither Riddiford nor Inoue teaches or suggests "one of said keys being multifunctional and being in a position remote from all other keys," as recited in Claim 1. However, the Examiner respectfully disagrees.

Firstly, Applicant used a particular words recited in the claim, e.g. "in a position remote from all other keys". During patent examination, the pending claims must be given their broadest reasonable interpretation. In re Hyatt, 211 F.3d 1367, 1372, 54 USPQ2d 1664, 1667 (Fed. Cir. 2000). Applicant always has the opportunity to amend the claims during prosecution, and broad interpretation by the examiner reduces the possibility that the claim, once issued, will be interpreted more broadly than is justified. In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550- 51 (CCPA 1969). The broadest reasonable interpretation of the claims must also be consistent with the interpretation that those skilled in the art would reach. In re Cortright, 165 F.3d 1353, 1359, 49 USPQ2d 1464, 1468 (Fed. Cir. 1999). See MPEP 2111.

Secondly, Riddiford discloses a telephone device 1 (see Fig. 5) includes a front cover and a plurality of keys, e.g., key 40 to 43. The key 40 and 41 are separated by keys 42 and 43. In other words, the key 40 is in position remote from all other keys 41 to 43. Again, the Applicant does not describe how one of the keys being in a position remote from all other keys, e.g., how far, near, adjacent or separate from other. Therefore, the Examiner is reasonably and broadly interpreted that the key 40 is in position remote from all other keys 41 to 43 (see Fig. 5).

Applicant, on pages 3 to 4 of the remark, argues that the Office Action provides no support for the assertion that Riddiford discloses a device in which one of the keys is in a position remote from all other keys. Although the Office Action notes that "all other keys" are keys 12 and 40, 41, 42, 43, there is no indication as to which single key is remote from all other keys. However, the Examiner respectfully disagrees.

Riddiford discloses a telephone device 1 (see Fig. 5) includes a front cover and a plurality of keys, e.g., key 40 to 43 and the key 40 is in position remote from all other keys 41 to 43.

Applicant, on pages 4 of the remark, argues that Inoue also does not teach or suggest a multifunctional key that is "in a position remote from all other keys," as recited by Claim 1. However, the Examiner respectfully disagrees.

Firstly, as mentioned above or in the previous Office Action, Riddiford discloses a telephone device 1 (see Fig. 5) includes a front cover and a plurality of keys, e.g., key 40 to 43 and the key 40 is in position remote from all other keys 41 to 43. However, Riddiford does not disclose one of keys are multifunction. On the other hand, the Examiner relies on Inoue which teaches a main soft key 3 (multifunction key) can be operated by the key rotating up or down and pressing it in the same way as clicking a mouse button of a computer. Note: the Applicant does not describe what the multifunctional key is. Therefore, the Examiner is broadly and reasonably interpreted the multifunctional key is liked the main soft key which does multi tasks. So that, the Examiner contends that the combination of Riddiford and Inoue show all limitation in the claims.

Secondly, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Thirdly, Inoue discloses in the Abstract and Figure. 1, that a portable terminal comprises a main soft key 3 (multifunction key which is capable of moving upward and downward) and key pad 5 (key pad includes a number of keys, e.g., key 0 key 9, power key and convert key). The main soft key 3 (multifunction key 3) is separated from the key 5. In other words, the main key 3 is in position remote from key pad 5. Note: The Applicant does not describe how a key is in position remote from other key, e.g., near, far, adjacent or separate from other. Therefore, the Examiner contends that the combination of Riddiford and Inoue show all limitations in claim.

Applicant, on pages 5 of the remark, argues that neither Riddiford nor Inoue teaches or suggests "one of said keys being multifunctional and being the only key disposed on a first surface first the cover, " as recited in Claim 15. However, the Examiner respectfully disagrees.

Firstly, the Applicant does not describe what a multifunction key is. Therefore, the Examiner is broadly and reasonably interpreted that a main soft key 3 is multifunction key which is able to move upward and downward (see second reference, Inoue, Abstract and Fig. 1)

Secondly, Inoue discloses in the Abstract and Figure. 1, that a multifunction key 3 can be operated by the key rotating up or down and pressing it in the same way as clicking a mouse

button of a computer. The multifunction key 3 is disposed on the top cover of the mobile phone 1.

Thirdly, in response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant, on pages 6 of the remark, argues that Riddiford does not teach or suggest "the function of the key is dependent upon the state of the device," as recited in Claims 1 and 15. However, the Examiner respectfully disagrees.

Riddiford discloses "Referring first to the apparatus shown in FIGS. 1 to 4, a combined palmtop computer and mobile telephone unit is shown with the unit folded in FIGS. 1 and 4 and opened out for use as a palmtop in FIGS. 2 and 3". It should be noted that key pad 12 is disposed on the front cover 1 for using in the phone mode; and the key pad 5 is disposed between the front cover 1 and back cover 2 for using in palmtop computer mode. Therefore, when the front cover is closed, a user may use the key pad 12 as function of mobile phone and if the front cover is opened, the user may use the key pad 5 as function of palmtop computer mode. In other word, the key pad 12 and 5 are dependent upon the state (open or close) of the device.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 9-12, 14-16 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddiford (U.S. 6587675) in view of Inoue et al. (U.S. 6332024).

Regarding claim 1, Riddiford discloses a device (Fig. 1 and 2), comprising:

a body (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52);

a cover (casing 1) having a closed position for at least partially covering the body and an open position (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52); and

keys 12 and 40-43 (Fig. 1 and 5) accessible when the cover in closed position, one of the said keys being in a position remote from all other keys 12 and 40-43 (Fig. 1 and Fig. 5, col. 3, line 34 to col. 4, line 52), wherein

the function of the key is dependent upon the state of the device, and for at least on state of the device, operation of the key controls the provision of information on the display (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52. Riddiford discloses that when the unit is in closed position, it is being used as cell phone; and when the unit is in opened position, it is being used as palmtop computer);

wherein the key is arranged to be active when the cover is in the closed position and inactive when the cover is in the open position, and wherein the key is located on the (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52. Riddiford discloses that when the unit is in closed position, it

is being used as cell phone; and when the unit is in opened position, it is being used as palmtop computer).

However, Riddiford does not disclose one of keys being multifunctional.

In the same field of endeavor, Inoue et al. disclose one of keys being multifunctional 3 (fig. 1, col. 5, lines 1-42 and col. 8, lines 33-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable terminal of Riddiford by specifically including one of keys being multifunctional, as taught by Inoue et al., the motivation being in order to reduce a number of keys on the device or minimum entry keys.

Regarding claim 2, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. Further, Riddiford discloses a device further comprising a the display having a portion which is visible when the cover is in the closed position, and the key is operable to controls the provision of information on the portion of the display visible when the cover is in the closed position (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

Regarding claim 3, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. Further, Riddiford discloses a device which comprises a receiver Riddiford discloses.

Regarding claim 6, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. Further, Riddiford disclose a device which comprises a transmitter (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

Regarding claim 9, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. Further, Riddiford discloses a device wherein operation of the key is a single actuation (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

Regarding claim 10, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. Further, Riddiford discloses a device further comprising a hinge switch for detecting when the cover makes a specific acute angle with the body (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

Regarding claim 11, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 10. Further, Riddiford discloses a device further comprising a processor for detecting, via the hinge switch, when the cover is in the open position and when the cover is in the closed position (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

Regarding claim 12, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 11. Further, Riddiford discloses a device wherein the processor is arranged to disable the multifunctional key when the cover is in the open position (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

Regarding claim 14, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. Further, Riddiford discloses wherein the key is the only key disposed on a first surface of the cover (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52). Furthermore, Inoue et al. disclose wherein the multifunctional key (fig. 1, col. 5, lines 1-42 and col. 8, lines 33-40).

Regarding claim 15, Riddiford discloses a device comprising:

a body (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52);

a cover having a closed position for at least partially covering the body and an open position (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52); and

keys accessible when the cover is in the closed position, one of said keys being the only key disposed on a first surface of the cover (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52),

wherein: the function of the key is dependent upon the state of the device, and for at least one state of the device, operation of key controls the provision of information on the display, wherein the key is arranged to be active when the cover is in the closed position and inactive when the cover is in the open position (Fig. 1 and 2, col. 3, line 34 to col. 4, line 52).

However, Kumagai et al. do not disclose one of keys being multifunctional.

In the same field of endeavor, Inoue et al. disclose one of keys being multifunctional 3 (fig. 1, col. 5, lines 1-42 and col. 8, lines 33-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable terminal of Riddiford by specifically including one of keys being multifunctional, as taught by Inoue et al., the motivation being in order to reduce a number of keys on the cell phone or minimum entry keys on the cell phone.

Regarding claim 16, this claim is rejected for the same reason as set forth in claim 2.

Regarding claim 21, this claim is rejected for the same reason as set forth in claim 9.

4. Claim 4 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddiford in view of Inoue et al. (U.S. 6332024) and further in view of Amin (U.S. 6006087).

Regarding claim 4, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. However, the combination of Riddiford and Inoue et al. do not disclose a device wherein, when the device is in a state corresponding to the receipt of a message, the key is operable to controls the provision of information corresponding to the message.

In the same field of endeavor, Amin discloses a device wherein, when the device is in a state corresponding to the receipt of a message, the key is operable to controls the provision of information corresponding to the message (col. 1, line 59 to col. 2, line 10).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable terminal of the combination of Riddiford and Inoue et al. by specifically including a device wherein, when the device is in a state corresponding to the receipt of a message, the key is operable to controls the provision of information corresponding to the message, as taught by Amin, the motivation being in order to review a specific message by pressing a button.

Regarding claim 17, this claim is rejected for the same reason as set forth in claim 4.

5. Claim 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddiford in view of Inoue et al. (U.S. 6332024) and further in view of Botzas (U.S. 7236772).

Regarding claim 5, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. However, the combination of Riddiford and Inoue et al. do not disclose a device wherein, when the device is in a state corresponding to the receipt of a missed call, the key is operable to controls the provision of information corresponding to the missed call.

In the same field of endeavor, Amin discloses a device wherein, when the device is in a state corresponding to the receipt of a missed call, the key is operable to controls the provision of information corresponding to the missed call (col. 1, lines 15 to 53).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable terminal of the combination of Riddiford and Inoue et al. by specifically including a device wherein, when the device is in a state corresponding to the receipt of a missed call, the key is operable to controls the provision of information corresponding to the missed call, as taught by Botzas, the motivation being in order to place outgoing call based upon receiving information.

Regarding claim 18, this claim is rejected for the same reason as set forth in claim 5.

6. Claim 7 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddiford in view of Inoue et al. (U.S. 6332024) and further in view of Hawkins et al. (U.S. 6516202).

Regarding claim 7, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. However, the combination of Riddiford and Inoue et al. do not disclose a device wherein, when the device is in an idle state, the key is operable to controls the provision of information corresponding to the last number dialed.

In the same field of endeavor, Hawkins et al. disclose a device wherein, when the device is in an idle state, the key is operable to controls the provision of information corresponding to the last number dialed (col. 8, line 32-68).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable terminal of the combination of Riddiford and Inoue et al. by specifically including a device wherein, when the device is in an idle state, the key is operable to controls the provision of information corresponding to the last number dialed, as taught by Hawkins et al., the motivation being in order to generate numbers to dial.

Regarding claim 19, this claim is rejected for the same reason as set forth in claim 7.

7. Claim 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Riddiford in view of Inoue et al. (U.S. 6332024) and further in view of Kim (U.S. 6519475).

Regarding claim 8, the combination of Riddiford and Inoue et al. disclose all the limitations in claim 1. However, the combination of Riddiford and Inoue et al. do not disclose a device arranged for coupling to a headset, and when the device is in a headset coupled state, key is operable to controls the provision of information corresponding to the last number dialed.

In the same field of endeavor, Kim discloses a device arranged for coupling to a headset, and when the device is in a headset coupled state, the key is operable to controls the provision of information corresponding to the last number dialed (col. 3, lines 48-54).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the portable terminal of the combination of Riddiford and Inoue et al. by specifically including a device arranged for coupling to a headset, and when the device is in a headset coupled state, the key is operable to controls the provision of information corresponding to the last number dialed, as taught by Kim, the motivation being in order to

provide the operational mode of the mobile phone to change from the telephone mode to the idle mode in response to the second mode signal.

Regarding claim 20, this claim is rejected for the same reason as set forth in claim 8.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 571-272-7896. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on 571-272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-7687.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Dai A Phuong/
Examiner, Art Unit 2617
Date: 11/13/2009

/Patrick N. Edouard/
Supervisory Patent Examiner, Art Unit 2617